OPERATORS MANUAL

RANDELL®

This manual provides information on Installation, operating, maintenance, trouble shooting & replacement parts for

CURVED GLASS DISPLAY CASE

NOTIFY CARRIER OF DAMAGE AT ONCE.

It is the responsibility of the consignee to inspect the container upon receipt of same and to determine the possibility of any damage, including concealed damage. Randell suggests that if you are suspicious of damage to make a notation on the delivery receipt. It will be the responsibility of the consignee to file a claim with the carrier. We recommend that you do so at once.

Information contained in this document is known to be current and accurate at the time of printing/creation. Unified Brands recommends referencing our product line websites, unifiedbrands.net, for the most updated product information and specifications.

UNIFIED BRANDS
FOODSERVICE EQUIPMENT SOLUTIONS
A DOVER COMPANY

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Congratulations on your recent purchase of Randell food service equipment, and welcome to the growing family of satisfied Randell customers.

Our reputation for superior products is the result of consistent quality craftsmanship. From the earliest stages of product design to successive steps in fabrication and assembly, rigid standards of excellence are maintained by our staff of designers, engineers, and skilled employees.

Only the finest heavy-duty materials and parts are used in the production of Randell brand equipment. This means that each unit, given proper maintenance, will provide years of trouble free service to its owner.

SAFETY PROCEDURES

- Always Disconnect power cord before attempting to work on or to clean equipment. Turning the switch off is insufficient as the power remains live to the cabinet and can be a hazard.
- Route the power cord so that it is not likely to be walked on or pinched by other appliances.
- Your unit is equipped with a grounded plug (a plug with 2 blades and a grounding post). Do not defeat the purpose of the plug by removing ground post or using an adapter without properly grounding the outlet.
- Disconnect plug when the appliance will be idled for a long period of time.
- Do not attempt to service this unit yourself as removing covers may cause unnecessary exposure to dangerous voltage.
- Never connect the unit to a power source while standing in water. Wet hands and wet floors should be avoided when connecting any electrical appliance to a power outlet.
- When a replacement part is required, always insist on factory authorized parts.
- When working on units equipped with casters depress caster brake to secure the unit in place.

In addition, all Randell food service equipment is backed by some of the best warranties in the food service industry and by our professional staff of service technicians.

Retain this manual for future reference.

NOTICE: Due to a continuous program of product improvement, Randell Manufacturing reserves the right to make changes in design and specifications without prior notice.

NOTICE: Please read the entire manual carefully before installation.
If certain recommended procedures are not followed, warranty claims will be denied.

MODEL NUMBER _____
SERIAL NUMBER _____
INSTALLATION DATE _____

Randell Manufacturing Service and Parts Hotline

The serial number is located inside the display case cabinet.

Service and Parts Hotline 800-621-8560.

Warranty Policies

Congratulations on your purchase of a Randell manufactured piece of equipment. Randell believes strongly in the products it builds and backs them with the best warranty in the industry. Standard with every unit comes the piece of mind that this unit has been thoroughly engineered, properly tested and manufacture to excruciating tolerances, by a manufacturer with over 25 years of industry presence. On top of that front end commitment, Randell has a dedicated staff of certified technicians that monitor our own technical service hotline at 1-800-621-8560 to assist you with any questions or concerns that may arise after delivery of your new Randell equipment.

1. 1 ear parts replacement of any and all parts that are found defective in material or workmanship
2. Free ground freight to customer specified location for all in warranty parts within continental U.S.
3. 3 months (90 days) labor reimbursement for any repairs that are caused by Randell's use of defective material or workmanship (Reasonable geographic and industry rates do apply)

To request a warranty approval number, call our Field Service Department at 1-888-994-7636.

WHEN OPTIONAL 5 YEAR COMPRESSOR WARRANTY APPLIES

Randell will provide to the original customer, that owns a Randell piece of equipment, and has an optional compressor warranty with one of the following options:

1. Provide reimbursement to servicing company for the cost of locally obtained replacement compressor in exchange for the return of the defective compressor sent back freight prepaid. Note: Randell Manufacturing does limit amount of reimbursement allowed and does require bill from local supply hose where compressor was obtained (customer should not pay servicing agent up front for compressor).
2. Provide repair at the manufacturing facility by requiring that the defective unit be sent back to Randell freight prepaid. Perform repair at the expense of Randell and ship the item back to the customer freight collect.
3. Furnish a complete condensing unit freight collect in exchange for the return of the defective compressor sent back freight prepaid. (Decisions on whether or not to send complete condensing units will be made by Randell's in-house service technician).

Warranty Policies (continued)

0WHEN OPTIONAL LABOR EXTENSION POLICY APPLIES

Randell Manufacturing will provide reimbursement of labor invoiced to any customer that has an optional labor extension of our standard warranty. (Reasonable geographic and industry rates do apply) Randell offers both 1 and 2 year extensions. Labor extensions begin at the end of our standard warranty and extend out 9 months to 1 calendar year or 21 months to 2 calendar years from date of purchase. Please contact Randell Manufacturing's technical service hotline at 1-800-621-8560 for details and warranty authorization numbers.

WHEN EXPORT WARRANTIES APPLY

1. Randell Manufacturing covers all non-electrical components under the same guidelines as our standard domestic policy.
2. All electrical components operated on 60 cycle power are covered under our standard domestic policy.
3. All electrical components operated on 50 cycle power are covered for 90 days from shipment only.
4. Extended warranty options are not available from the factory.

ITEMS NOT COVERED UNDER WARRANTY

1. Maintenance type of repairs such as condenser cleaning, temperature adjustments, clogged drains, unit leveling, and gasket replacement or cleaning.
2. Repairs caused by abuse such as broken glass, freight damage, or scratches and dents.
3. Electrical component failure due to water damage from cleaning procedures.

QUOTATIONS

Verbal quotations are provided for customer convenience only and are considered invalid in the absence of a written quotation. Written quotations from Randell are valid for 30 days from quote date unless otherwise specified. Randell assumes no liability for dealer quotations to end-users.

SPECIFICATION & PRODUCT DESIGN

Due to continued product improvement, specification and product design may change without notice. Such revisions do not entitle the buyer to additions. Changes or replacements for previously purchased equipment.

SANITATION REQUIREMENTS

Certain areas require specific anitation requirements other than N.S.F. & U.L. standards. Randell must be advised of these specifications before fabrication of equipment. In these special circumstance, a revised quotation may be required to cover additional costs. Failure to notify Randell before fabrication holds the dealer accountable for all additional charges.

CANCELLATIONS

Orders canceled prior to production scheduling entered into engineering/production and cancelled are subject to a cancellation charge (contact factory for details).

Warranty Policies (continued)

STORAGE CHARGES

Randell makes every effort to consistently meet our customers shipment expectations. If after the equipment has been fabricated, the customer requests delay in shipment, and warehousing is required:

1. Equipment held for shipment at purchasers request for a period 30 days beyond original delivery date specified will be invoiced and become immediately payable.
2. Equipment held beyond 30 days after the original delivery date specified will also include storage charges.

SHIPPING & DELIVERY

Randell will attempt to comply to any shipping, routing or carrier request designated by dealer, but reserves the right to ship merchandise via any responsible carrier at the time equipment is ready for shipment. Randell will not be held responsible for any carrier rate differences; rate differences are entirely between the carrier and puchaser. Point of shipping shall be determined by Randell (Weidman, MI/Tucson, AZ). At dealers request, Randell will endeavor whenever practical to meet dealers request. Freight charges to be collect unless otherwise noted.

DAMAGES

All crating conforms to general motor carrier specifications. To avoid concealed damage, we recommend inspection of every carton upon receipt. In the event the item shows rough handling or visible damage, to minimize liability, a full inspection is necessary upon arrival. A notation must be placed on the freight bill and signed for by the truck driver. Appearance of damage will require removing the crate in the presence of the driver. Consignee is responsible for filing of freight claims when a clear delivery receipt is signed. Claims for damages must be filed immediately (within 10 days) by the consignee with the freight carrier. Retain all cartons and merchandise for inspection.

RETURNED GOODS

Authorization for return must first be obtained from Randell before returning any merchandise. Any returned goods shipment lacking the return authorization number will be refused, all additional freight costs to be borne by the returning party. Returned equipment must be shipped in original carton, freight prepaid and received in good conditions. Any returned merchandise is subject to a minimum handling charge (consult factory for rate).

INSTALLATION

Equipment installation is the responsibility of the dealer and/or their customer.

PENALTY CLAUSES

Dealer penalty clauses, on their purchase order or contractually agreed to between the dealer and their clients are not binding on Randell. Randell does not accept orders subject to penalty clauses. This agreement supersedes any such clauses in dealer purchase orders.

EXPORT POLICY

All quotations for export sales will be handled by Dorian Drake International (www.doriandrake.com), Randell's export management organization.

* FOOTNOTES IN REFERENCE TO PARAGRAPHS ABOVE
1. Herein called Randell.
2. NET means list price less discount, warranty, labor policy, freight, Randell delivery and other miscellaneous charges.
CASH DISCOUNTS WILL BE CALCULATED ON NET ONLY.

4100SCA

Model	L	D	H	Display area shelves sq. ft.	HP	NEMA	VOLT	SHIP WT.
4137SCA	37"	34.5"	46"	16.2	1/3	5-15P	115	500
4149SCA	49"	34.5"	46"	22.6	3/8	5-15P	115	560
4161SCA	61"	34.5"	46"	29	1/2	5-15P	115	675
4173SCA	73"	34.5"	46"	35.2	1/2	5-20P	115	805

4100REA

Model	L	D	H	Display area shelves sq. ft.	HP	NEMA	VOLT	SHIP WT.
4137REA	37"	34.5"	46"	16.2	1/3	5-15P	115	500
4149REA	49"	34.5"	46"	22.6	3/8	5-15P	115	560
4161REA	61"	34.5"	46"	29	1/2	5-15P	115	675
4173REA	73"	34.5"	46"	35.2	1/2	5-20P	115	805

4100DR

Model	L	D	H	Display area shelves sq. ft.	HP	SHIP WT.
4137DR	37"	34.5"	46"	16.2	1/3	400
4149DR	49"	34.5"	46"	22.6	3/8	460
4161DR	61"	34.5"	46"	29	1/2	475
4173DR	73"	34.5"	46"	35.2	1/2	605

4100DT

Model	L	D	H	Display area shelves sq. ft.	HP	SHIP WT.
4137DT	37"	35"	46.5"	16.2	1/3	500
4149DT	49"	35"	46.5"	24.3	3/8	560

Unit Installation

RECEIVING SHIPMENT

Upon arrival, examine the exterior of the shipping crate for signs of abuse. It is advisable that the shipping crate be partially removed, in order to examine the cabinet for any possible concealed damages are evident, replace the crate in order to protect the unit during local delivery. If the unit is damaged, it should be noted on the delivery slip or bill of lading and signed to that effect. A claim must be filed immediately against the carrier indicating the extent and estimated cost of damage occurred.

LOCATING YOUR NEW DISPLAY MERCHANDISER

The following conditions should be considered when selecting a location for your unit:

1. Countertop load - The countertop on which the display merchandiser will rest must be free of vibration and suitably strong enough to support the combined weights of the unit plus the maximum product load weight.

2. Clearance - There must be a combined total of at least 10" clearance at the top of the unit.

3. Ventilation - The air cooled self contained display merchandiser requires a sufficient amount of cool clean air. Avoid placing the unit near heat generating equipment such as ovens, ranges, heaters, fryers, steam kettles, etc. and out of direct sunlight. Avoid locating the make table in an ungrated room or where the room temperature may drop below 55° F or above 90° F.

ELECTRICAL SUPPLY

The wiring should be done by a qualified electrician in accordance with local electrical codes. A properly wired, and grounded outlet will assure proper operation. Please consult the data plate attached to the compressor to ascertain the correct electrical requirements. Supply voltage and amperage requirements are located on the serial number tag.

NOTE: It is important that a voltage reading be made at the compressor motor electrical connections, while the unit is in operation, to verify that the correct voltage required by the compressor is being supplied. Low or high voltage can detrimentally affect operation and thereby void its warranty.

NOTE: It is important that your unit has its own dedicated line. Condensing units are designed to operate with a voltage fluctuation of plus of minus 10% of the voltage indicated on the unit data plate. Burn out of a condensing unit due to exceeding voltage limits will void the warranty.

DOOR INSPECTION

1. Check doors to ensure that they are sealing properly.
2. Check doors for proper alignment.
3. Check doors to ensure that they open and shut freely.

INSTALLATION CHECKLIST

After the final location of the display merchandiser has been determined refer to the following checklist prior to start up:

1. Check all exposed refrigeration lines to ensure that they are not kinked, dented or rubbing together.

2. Check that condenser and evaporator fans rotate freely without striking any stationary members.

3. Unit must be properly leveled.

4. Plug unit in and turn on main power switch and/or cold control.

5. Refer to the front of this manual for serial number location. Please record this information in your manual on page 3 now. It will be necessary when ordering replacement parts or requesting warranty service.

6. Confirm that unit is holding temperature. Set controls to desired temperature for your particular ambient and altitude.

7. Allow your display merchandiser to operate for approximately 2 hours before putting in food. This allows interior to cool down to the correct storage temperature.

NOTE: All motors are oiled and sealed.

After installing unit in final location make sure counter surface is clean and seal around base perimeter with silicone adhesive, to eliminate spillage of liquid from getting under base.

FIGURE A - Temperature control adjustments

The temperature control allows for temperature adjustments. Turning the adjustment knob clockwise will result in increased cooling. Turning it ti far clockwise can result in freeze-up, while turning it counterclockwise to far will shut the compressor off. If your cabinet temperature is to warm adjust temperature control.

Unit Operation

Your display merchandiser's temperature is adjusted by a cold control. It is important to keep the doors closed as much as possible. This is especially important in the summer and when ambient temperatures exceed 80° F. to help reduce the chance of condensation forming on the glass and to increase the efficiency of the merchandiser.

NOTE: Even though your display case was designed for heavy use, excessive door openings should be avoided, in order to maintain proper box temperature and eliminate the possibility of coil freeze up.

PREVENTIVE MAINTENANCE

Randell strongly suggests a preventive maintenance program which would include the following **Monthly** procedures:

1. Cleaning of all condenser coils. Condenser coils are a critical component in the life of the compressor and must remain clean to assure proper air flow and heat transfer. Failure to maintain this heat transfer will affect unit performance and eventually destroy the compressor. Clean the condenser coils with coil cleaner and/or a vacuum, cleaner and brush.

NOTE: Brush coil in direction of fins, normally vertically as to not damage or restrict air from passing through condenser.

2. Clean fan blade on the condensing.
3. Clean and disinfect drains with a solution of warm water and bleach.
4. Clean and disinfect drain lines and evaporator pan with a solution of warm water and bleach.
5. Clean all gaskets on a weekly if not daily basis with a solution of warm water and a mild detergent to extend gasket life.
6. Do not wash interior mirrors with abrasive rag or cleansers.

NOTE: DO NOT USE SHARP UTENSILS

RECOMMENDED CLEANERS FOR YOUR STAINLESS STEEL INCLUDE THE FOLLOWING:

Job	Cleaning Agent	Comments
Routine cleaning	Soap, ammonia, detergent medallion	Apply with a cloth or sponge
Fingerprints & Smears	Arcal 20, Lac-O-Nu, Ecoshine	Provides a barrier film
Stubborn stains and discoloration	Cameo, Talc, Zud, First Impression	Rub in the direction of the polish lines
Grease, fatty acids, blood and burnt on foods	Easy-off, Degrease It, Oven Aid	Excellent removal on all finishes
Grease and oil	Any good commercial detergent	Apply with a sponge or cloth
Restoration	Benefit and Super Sheen	Good idea monthly

Reverence: Nickel Development Institute, DiverseyLevr, Savin, Ecolab, NAFEM

Do not use steel pads, wire brushes, scrapers or chloride cleaners to clean your stainless steel.

CAUTION: DO NOT USE ABRASIVE CLEANING SOLVENTS, NEVER USE HYDROCHLORIC ACID (MURIATIC ACID) ON STAINLESS STEEL.

Proper maintenance of equipment is the ultimate necessity in preventing costly repairs. By evaluating each unit on a regular schedule you can often catch and repair minor problems before they completely disable the unit and become burdensome on your entire operation.

For more information on preventive maintenance consult your local service company or CFESA member. Most repair companies offer this service at very reasonable rates to allow you the time you need to run your business along with the peace of mind that all your equipment will last throughout its expected life. These services often offer guarantees as well as the flexibility in scheduling or maintenance for your convenience.

Randel believes strongly in the products it manufactures and backs those products with one of the best warranties in the industry. We believe with the proper maintenance and use you will realize a profitable return on your investment and years of satisfied service.

EASY TO FOLLOW TROUBLE SHOOTING CHART

PROBLEM	POSSIBLE CAUSE	REMEDY
A. Refrigerator not running	1. Circuit breaker tripped 2. Power cord unplugged 3. Thermostat turned off 4. Unknown	1. Reset 2. Plug In 3. Turn on 4. Call service agency
B. Condensing unit operates for long periods or runs continuously	1. Excessive heat load placed in unit 2. Prolonged or too frequent door openings or door ajar 3. Gasket not sealing 4. Dirty condenser coil 5. Evaporator coil frozen 6. Unknown	1. Allow unit sufficient time to remove heat 2. Make sure door is closed when not in use 3. Adjust door or replace gasket. 4. Clean coil 5. Unplug unit, defrost coil then adjust cold control to warmer position 6. Call service agency
C. Unit is noisy	1. Check for loose compressor mounts 2. Check fan motor mounts 3. Check fan blades for obstructions 4. Check all panels, louvers and covers 5. Unknown	1. Tighten if necessary 2. Tighten if necessary 3. Remove any obstructions. Tighten or adjust shrouds. 4. Tighten and isolate as needed 5. Call service agency
D. Temperature too high	1. Check power cord and circuit breaker 2. Temperature control set too high 3. Dirty condenser coil 4. Evaporator coil froze 5. Unknown	1. Plug in cord or reset breaker 2. Adjust control 3. Clean coil 4. Unplug unit, defrost coil then adjust cold control to warmer position 5. Call service agency
E. Compressor runs but unit not cooling	1. Fan blades have encountered an obstruction 2. Unknown	1. Check for obstruction and free fan blade 2. Call service agency
F. Product freezing	1. Check thermostat 2. Unknown	1. Replace or turn up 2. Call service agency
G. Door will not close	1. Check opening for obvious obstruction 2. Check self closing spring 3. Check for loose or worn hinges	1. Remove any obstruction 2. Adjust or replace spring 3. Replace hinges
H. Unit leaks water	1. Check for blockage in drain 2. Check for cracked drain pan 3. Check for level 4. Check for loose or disconnected drain hose	1. Clean evaporator pan and clear drain 2. Inspect and replace if necessary 3. Level unit 4. Tighten or reconnect hose

REPLACEMENT PARTS LIST

CURVED GLASS DISPLAY 4100 SERIES

UNIT	4137	4149	4161	4173	4137DT	4149DT
Cold Control	HD CNT200	HD CNT200	HD CNT200	HD CNT200	HD CNT200	HD CNT200
Light Bulb	EL TUB018	EL TUB018	EL TUB0306	EL TUB0306	EL TUB9801	EL TUB030
Light Fixture	EL LGT037	EL LGT049	EL LGT0306	EL LGT0306	N/A	EL LGT061 (2), 073 (1)
Top Shelf	HD SHL2132	HD SHL185 (2)	HD SHL204 (2)	HD SHL200 (2)	N/A	N/A
Bottom Shelf	HD SHL2632	HD SHL186 (2)	HD SHL205 (2)	HD SHL201 (2)	HD SHL2632	HD SHL186 (2)
Shelf Pilaster RH	HD SHL202	HD SHL202	HD SHL202	HD SHL202	HD RCK9804	HD RCK9803
Shelf Pilaster LH	HD SHL203	HD SHL203	HD SHL203	HD SHL203	HD RCK9803	HD RCK9803
RH Door	HD DOR037R	HD DOR049R	HD DOR061R	HD DOR073R	HD DOR9804R	HD DOR9901R
LH Door	HD DOR037L	HD DOR049L	HD DOR061L	HD DOR073L	HD DOR9804L	HD DOR9901L
Door Lock	HD LCK026	HD LCK026	HD LCK026	HD LCK026	HD LCK026	HD LCK026
Key	HD DORKEY	HD DORKEY	HD DORKEY	HD DORKEY	HD DORKEY	HD DORKEY
Frame	HD FRM035	HD FRM049	HD FRM062	HD FRM073	HD FRM99804	HD FRM9901
Wiper Gasket	IN GSK600	IN GSK600	IN GSK600	IN GSK600	IN GSK600	IN GSK600
RH Bumper	IN GSK601	IN GSK601	IN GSK601	IN GSK601	IN GSK601	IN GSK601
LH Bumper	IN GSK602	IN GSK602	IN GSK602	IN GSK602	HD BMP0008	HD BMP0008
Shelf Support	RP SPT9901	RP SPT9902	RP SPT9903	RP SPT9904	RP SPT9901	RP SPT9902
Condensing Unit	RF CON9803	RF CON0202	RF CON0107	RF CON0107	RF CON9803	RF CON0202
Compressor	RF CON020-134	RF CON0104P	N/A	N/A	RF CON020-134	RF CON0104P
Evap Coil	RF CO1120B	RF CO1125	RF CO1127	RF CO1135	RF CO1120B	RF CO1125
Evap Motor	EL MTR0230	EL MTR0230	EL MTR0230	EL MTR0230	EL MTR0230	EL MTR0230
Fan Bracket	RP BRK1050	RP BRK1050	RP BRK1050	RP BRK1050	RP BRK1050	RP BRK1050
Front Louver	RP LVR9937	RP LVR9949	RP LVR9961	RP LVR9973	RP LVR9937	RP LVR9949
Rear Louver	RP LVR9938	RP LVR9950	RP LVR9962	RP LVR9974	RP LVR9938	RP LVR9950
Switch	EL SWT1451-21	EL SWT1451-21	EL SWT1451-21	EL SWT1451-21	EL SWT1451-21	EL SWT1451-21
Trim	RP EXT200	RP EXT200	RP EXT200	RP EXT200	RP EXT200	RP EXT200
Front Glass	HD GLS9801	HD GLS049	HD GLS061	HD GLS073	HD GLS9801	HD GLS049
Front Glass Cover	RP GCR037	RP GCR049	RP GCR061	RP GCR073	RP GCR037	RP GCR049
Expansion Valve	RF VLV200	RF VLV200	RF VLV300	RF VLV300	RF VLV200	RF VLV200
Door Spring	HD SPR036	HD SPR048	HD SPR003	HD SPR073	HD SPR036	HD SPR048
Bearings	HD BRG50P	HD BRG50P	HD BRG50P	HD BRG50P	HD BRG50P	HD BRG50P
Light Ballist	EL BLS100	EL BLS100	EL BLS400	EL BLS400	EL BLS100	EL BLS9801
Top Glass Shelf	HD SHL9901	HD SHL9903	HD SHL9905	HD SHL9907	HD GLS9801	HD GLS9910
Btm Glass Shelf	HD SHL9902	HD SHL9904	HD SHL9906	HD SHL9906	N/A	N/A

ALL QUANTITIES ARE (1) EXCEPT FOR THOSE MARKED (2)

NOTE: OLD LIGHT SINGLE POST
NOTE: NEW LIGHT DOUBLE POST